



UNITED STATES PATENT AND TRADEMARK OFFICE

15

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,072	02/12/2002	Michael Cook	CIS01-32(5136)	7574

7590 04/08/2005

David E. Huang, Esq.
CHAPIN & HUANG, L.L.C.
Westborough Office Park
1700 West Park Drive
Westborough, MA 01581

EXAMINER

AVELLINO, JOSEPH E

ART UNIT	PAPER NUMBER
----------	--------------

2143

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/075,072	Applicant(s) COOK ET AL.	
	Examiner Joseph E. Avellino	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

TL

DETAILED ACTION

1. Claims 1-26 are pending in this examination; claims 1, 5, 9-12, 16, 20-23 and 25 independent.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 24, and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 24 and 26 recite a packet with a time-to-live field such that the contents of the field result in expiration of the packet prior to reaching the client, which is not discussed in the specification. If this is an oversight by the Office, Applicant is invited to specifically point out where in the disclosure it teaches providing a packet with a time-to-live field such that the initial contents of the field result in expiration of the packet prior to reaching the client. It would cause undue experimentation for one of ordinary skill in the art at the time the invention was made to determine the details of a packet with a time-to-live field such that the initial contents of the field result in expiration of the packet prior to reaching the client.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 5, 8-12, 15, 16, and 19-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Cunningham et al. (USPN 6,493,765) (hereinafter Cunningham).

5. Referring to claim 1, Cunningham discloses a method for managing network traffic using network address translation, the method comprising the steps of:

In the NAT data structure 102, creating a first entry to coordinate first data flow (i.e. source address translation table entry) from a server to a client (i.e. from one source host to a destination host), and concurrently (the Office takes the term concurrently meaning substantially the same time) creating a second entry (i.e. destination address translation table entry) to coordinate a second data flow from the client to the server (col. 5, line 53 to col. 6, line 5);

conveying a data element of the first data flow from the server to the client based on the first entry (the server uses the NAT table 102 in order to send packets to the client) (col. 9, lines 29-60; Figure 7); and

Art Unit: 2143

conveying a data element of the second data flow from the client to the server based on the second entry (the client uses the NAT table to send packets to the server) (col. 10, lines 38-45; Figure 7).

6. Referring to claim 4, Cunningham discloses configuring the data communications device to operate as a gateway between a first network in which multiple servers (i.e. hosts) reside, and a second network in which multiple clients (i.e. hosts) reside, wherein the multiple servers includes the server from which the data element of the first data flow is conveyed, and wherein the multiple clients include the client form which the data element of the second data flow is conveyed (Figure 1; col. 4, lines 45-67).

7. Claims 5, 8, and 9-11 are rejected for similar reasons as stated above.

8. Claim 12, recites substantively the same invention as stated above, with the added limitation of "receiving a command from the server to create a second entry to coordinate a second data flow from the client in response to the command" which would be inherent to the system of Cunningham since a server is defined in the art as "a computer which sends information to another computer". By that rationale, claims 15, 16, and 19-22 are rejected for similar reasons as stated above.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-3, 6-7, 13-14, 17-18, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham in view of Applicants Admitted Prior Art (hereinafter AAPA).

11. Referring to claim 2, Cunningham discloses the invention substantively as described in claim 1. Cunningham does not disclose the first data flow is a RTSP packet, and the second data flow is a RTCP packet. AAPA discloses the first data flow is a RTSP packet, and the second data flow is a RTCP packet (p. 2, line 19 to p. 3, line

Art Unit: 2143

8). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Cunningham with AAPA in order to allow a standardized method of allowing streaming audio and video to the clients of Cunningham, while effectively controlling throughput and synchronization of the data stream.

12. Referring to claim 3, Cunningham discloses the invention substantively as described in claim 1. Cunningham does not disclose the first data element stores a port number X, and the second data element stores a second port number X+1. AAPA discloses storing a first data element stores a port number X, and the second data element stores a second port number X+1 (p. 3, lines 9-17). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Cunningham with AAPA in order to allow a standardized method of allowing streaming audio and video to the clients of Cunningham, while effectively controlling throughput and synchronization of the data stream.

13. Claims 6-7, 13-14, 17-18, 23, and 25 are rejected for similar reasons as stated above.

14. Referring to claims 24 and 26, Cunningham in view of AAPA disclose the invention substantively as described in claims 23 and 25. Cunningham in view of AAPA do not specifically disclose the packet has a TTL field resulting in expiration prior to

Art Unit: 2143

reaching the client. However it is well known that packets with TTL fields can be used to send messages to those entities which are only logically a certain distance away (i.e. sending a packet with a TTL field of 1 will result in sending a packet to only those computers which are adjacent to the sender computer). By this rationale, "Official Notice" is taken that both the concept and advantages of providing for a packet which has a TTL field resulting in expiration prior to reaching the client is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to modify the teaching of Cunningham and AAPA in order to control the propagation of packets within a network, thereby limiting traffic on the network and reducing the overall congestion on the networks.

Conclusion

Again, it is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art. As it is Applicant's right to continue to claim as broadly as possible their invention. It is also the Examiner's right to continue to interpret the claim language as broadly as possible. It is the Examiner's position that the detailed functionality (i.e. detailing how the NAT data structure is created) that allows for Applicant's invention to overcome the prior art used in the rejection, fails to differentiate in detail how these features are unique. As it is extremely well known in the networking art as already shown by Cunningham and other prior arts of records disclosed, for a NAT data structure method as well as other claimed features

Art Unit: 2143

of Applicant's invention. Thus, it is clear that Applicant must submit amendments to the claims in order to distinguish over the prior art use in the rejection that discloses different features of Applicant's claim invention.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Deng (US 2005/0027875) discloses method and apparatus for equalizing load of streaming media server.

17. Aravamudan et al. (USPN 6,006,272) discloses a method for network address translation.

18. Falck et al. (USPN 6,360,265) discloses arrangement of delivering IP datagrams for multimedia services to the same server.

19. Ju et al. (USPN 6,697,377) discloses communicating audio data in a packet switched network.

20. Geagan, III et al. (USPN 6,735,634) discloses real time protocol media recording.

21. Hurst et al. (USPN 6,192,404) discloses determination of distance between nodes in a computer network.

22. Kalmanek, Jr. et al. (USPN 6,757,290) discloses method for performing gate coordination on a per-call basis.

23. Koo (US 2001/0032270) discloses multi-telecommunication local IP network.

24. Schulzrinne, H. et al. RTP: A transport Protocol for Real-Time Applications, RFC 1889, January 1996.

Art Unit: 2143

25. Schulzrinne, H. et al. Real Time Streaming Protocol (RTSP), RFC 2326, April 1998.

26. Brassil, J et al. (*Program Insertion in real-time IP multicasts* ACM SIGCOMM Computer Communication Review, Vol. 29, Issue 2, April 1999 pp. 49-68) discloses seamlessly mixes real-time audio and video streams originating from multiple, physically separated sources.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEA



William C. Vaughn
Primary Examiner
Art Unit 2143
William C. Vaughn, Jr.